AMENDMENTS TO THE SPECIFICATION

[0019] Fig. 10 illustrates the spectrum of a typical ~~tunable filter~~ wavelength beam splitter superimposed over the modulated input spectrum of Fig. 6 (both in terms of intensity versus normalized frequency).

[0020] Fig. 11 illustrates the output signal (light intensity versus normalized frequency) resulting from the convolution of the modulated input spectrum of Fig. 10 with the spectrum of the tunable filter ~~of Fig. 10~~.

[0042] While the invention has been described using an optical cavity to provide the required wavelength beam splitting functionality, it is recognized that ~~the~~ other optical devices may be used. For example, a Michelson interferometer, properly designed to provide separate outputs characterized by spectra that match the period and the center-wavelength alignment of the multi-channel communication system of interest, could be used with the same advantageous results. Similarly, the invention of Fig. 2 could be practiced as well, but more expensively, by feeding the input light first to the wavelength beam splitter and then by having a separate tunable filter

associated with each output beam. Also, while it is preferred to have a tunable filter that isolates a single channel at a time, it is clear that the advantages of the invention would still be enjoyed, at least in part, by isolating and processing more than one channel at a time. All of these variations are considered to be part of the invention.

~~[0042]~~ **[0043]** Thus, while the invention has been shown and described in what is believed to be the most practical and preferred embodiments, it is recognized that appropriate deviations can be made within the scope of the disclosure. Therefore, the invention is not to be limited to the disclosed details, but is intended to embrace all equivalent structures and methods.